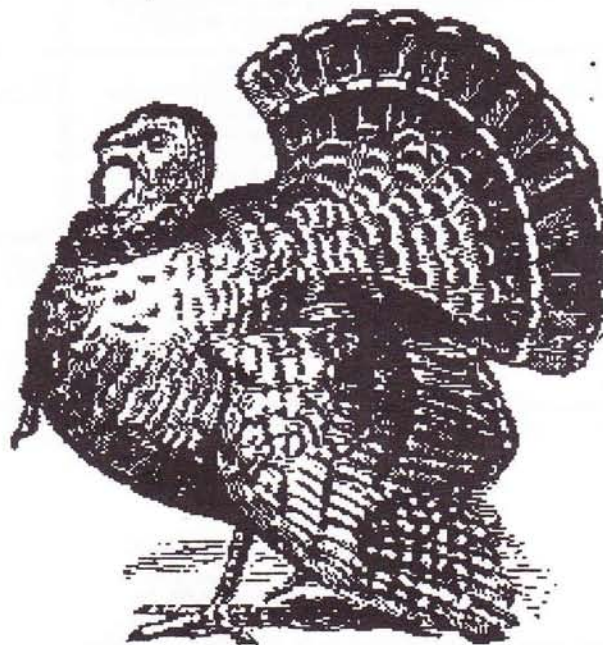


SLCC Journal

Newsletter of the San Leandro Computer Club November 1987



Micro-Time Review
Pen Pals
More PIO Hardware

ATARI®

9

Reasons Why We're So Friendly...



1. P:R:Connection

Now you're no longer limited to 'Atari Only' printers and MODEMS... the P:R:Connection is a flexible alternative to the Atari 850 interface. Suddenly hundreds of printers and MODEMS become compatible with your Atari, you can even share the same printer and MODEM with your ST or IBM PC.

The P:R:Connection plugs directly into the serial (disk drive) port of any 8 bit Atari and provides the user with a standard 'centronics' printer port and two RS-232 type serial ports. It also draws its energy from your computer which means one less cord fighting for an outlet while its compact size leaves your work space virtually clutter-free. The P:R:Connection's serial ports resemble those of the 850 interface, possessing the same signals and functions and using a fully compatible built in R: handler. Why not make your connection the right connection... with our Connection! **\$89.95** 6 ft. Standard MODEM Cables **\$14.95** 6 ft. Standard Printer Cables **\$14.95**

2. Printer Connection

It may look just like an ordinary cable... but don't let it's simplistic styling fool you! This little dynamo's electronics are built right into the cable end and it possesses the power of compatibility... printer compatibility. (Compatible with all 'centronics' parallel printers.) With the Printer Connection, you're no longer limited to 'Atari Only' printers.

So, for you "adventurous" Atari owners who dare to explore the world of printers... this one's for you! **\$59.95**

3. Multi I/O

Five functions in one box give your 130XE or 800XL the leading edge in performance and execution.

1) RAMDISK: Choose from two versions; 256K or 1Meg. Built in software allows the RAM to be partitioned into multiple disks as desired. The Multi I/O has its own AC power supply which allows the RAM to retain its memory when the computer is off.

2) PARALLEL PRINTER INTERFACE: A 'centronics' type parallel interface which uses a standard 850 cable. Accessed as P1: or P2: with or without LF.

3) SERIAL PRINTER/MODEM INTERFACE: This port accepts either a serial printer or RS232 type MODEM. The 850 handler is built in; always there when needed, which means an extra 1800 bytes of free memory! Built in software also allows a serial printer to appear as a parallel printer and provides it with XON/XOFF software handshaking.

4) SPOOLER: Use any amount of RAM as a print spooler. Works with either of the specified printer ports. Built in software features: Pause, Resume, Repeat Copies, Clear and Size.

5) HARD DISK INTERFACE: Supports up to

eight SASI and SCSI controllers at the same time to use industry standard 5-1/4" and/or 3-1/2" hard drives. 256K **\$199.95** 1Meg **\$349.95** 130XE Adapter (adds two cartridge slots) **\$19.95**

4. Optional 80 Column Adapter

Tune-in to 80 columns of information with the addition of our new 80 Column Adapter. Simply plug it inside of the Multi I/O case and watch it perform! The Adapter supports both monochrome composite and RGBI monitors. **\$99.95** AFA 80 Column Boards (for the Atari 800) **\$99.95**

5. US Doubler

Expanding the 1050's strength is what ICD's US Doubler is all about... a true performer in the niche of hardware modifications. With the simple addition of this chip set, your Atari is transformed into a powerhouse, radiating with innovative qualities never before possessed in a 1050; like true double density for greater storage and an accelerated I/O rate designed to triple your speed when combined with SpartaDOS.

Furthermore, the US Doubler is fully compatible with existing Atari software and not only supports true double density but, single density and the 130KB 'Dual Density' (1050 Mode) as well. ICD's US Doubler Package comes complete with two plug-in chips and SpartaDOS Construction Set (including two manuals and two program diskettes). **\$69.95**

US Doubler 1-4 without SpartaDOS Construction Set **\$39.95**

6. SpartaDOS Construction Set

Perfection... that's how we describe our DOS and we're sure you'll agree when you put the SpartaDOS Construction Set to work. It supports everything from the 810 disk drive to hard disk drives, RAMDISKS with the RAMBO XL modified 800XL or 1200XL, the 130XE, the modified 320K XE plus the AXLON 128 board for the 800! And there's more...

A special menu file allows rapid transfer, erasure and lock or unlock of tagged files, using only the Space Bar, Option, Start, and Select keys. The utility package also features a 32 character keyboard buffer, intelligent switching between disk densities, a binary file game menu, subdirectories, time/date file stamping, and a 175 page manual containing everything you ever wanted to know about SpartaDOS and the US Doubler. **\$39.95**

7. SpartaDOS X

Just what your 8 bit has been waiting for... a cartridge based DOS which adds increased power to your computer and includes a surplus of features such as 80 column support, Ultra Speed operation with the US Doubler and the

new 3-1/2" Atari drives plus high speed support for standard Indus GT drives. And for you programmers, now the time consuming process of searching and indexing is streamlined due to the built in data base's incredible speed. **\$79.95**

8. R-Time 8

We've got the time if you've got the Atari. In fact, the R-Time 8 will even provide you with continuous and automatic date information as well! Its unique piggyback cartridge sports a clock board and a three to five year battery back up. A top extension port welcomes the use of additional cartridges since this handy device of ours requires no cartridge area memory of its own. What's more, the R-Time 8 works with all DOS types and plugs into any slot on your Atari computer.

Put our SpartaDOS to work with the R-Time 8 and just like magic... each file you create or rewrite is now instantly tagged with time and date information. We're sure that the R-Time 8 will add a new and exciting dimension to your Atari, one that you'll rely on time after time! **\$69.95**

9. RAMBO XL

You'll be saying "thanks for the memory!" after the RAMBO XL transforms your 800XL or 1200XL into a mighty 256K computer and makes it memory compatible with the 130XE. Now your XL can support BASIC XE extended mode or the standard 64K RAMDISK supplied with Atari DOS 2.5. The new RD.COM handler supplied with SpartaDOS Construction Set gives a 192K RAMDISK... that's enough memory to duplicate a full double density disk in one pass! Our RAMBO XL package includes a plug-in decoding board and complete installation instructions.

You must supply the eight 256K DRAMS (available from ICD for \$32.00) and the DOS of your choice. The RAMBO XL provides a low cost answer to high performance memory enhancement. **\$39.95**

Get Your Computer A Friend Today!



ICD, INC. • 1220 Rock Street
Rockford, IL 61101-1437 • (815) 968-2228
ELN:6289-3936 • FAX:(815) 968-6888

**SAN LEANDRO
COMPUTER CLUB**

P.O. BOX 1506
SAN LEANDRO, CA 94577-0374

An independent, non-profit organization of ATARI microcomputer users. Membership provides access to the club print and magnetic libraries, subscription to the Journal and participation in club activities. Fee: \$20 - US and Canada : \$40 - Foreign

Club Officers:

President	Bob Barton	352-8118
Vice-President	Mike Sawley	482-5061
Treasurer	Lois Hansen	482-2222
Secretary	Jim Moran	523-9265

Program Chaimen:

General meeting	Richard Scott	887-8357
ST SIG meeting	*	*

Software Chairmen:

8-bit	Mark Perez	792-0398
	Cliff Schenkhuizen	537-5245
16-bit	Ron Points	436-4373

Disk Librarians:

8-bit	James Moran	523-9265
16-bit	Ron Points	436-4373
	Tom Andrews	436-4373

Print Librarian:

Einar Andrade	484-4484
---------------	----------

Technical Advisers:

C language	David Beckmeyer	632-1367
Mach. language	Frank Daniel	471-8133

Special Interest Groups

Basic SIG	Guy Cochrane	582-5561
Beginners SIG	Richard Stiehl	865-6859
Business SIG	Chuck Amaral	707 +446-4600
Comm. SIG	Mike Sawley	482-5061
Education SIG	Lois Hansen	482-2222
Pascal SIG	Mike Morrow	933-0236
	Gary Newport	785-2047
ST SIG	Bob Barton	352-8118
ST Software SIG	Ron Points	436-4373

SLCC JOURNAL

Permission to reprint uncopyrighted articles in any non - commercial application is permitted without written authorization, provided proper credit is given to the SLCC and the author. Opinions expressed are those of the authors and not necessarily those of the SLCC.

Editor	Bob Woolley	865-1672
Asst. Editors	Frank Kliewer	483-1481
	Jennie Kliewer	
Layout Asst.	Ralph Cavagnuolo	889-9060
Cover Art	Jim Hood	534-2197

TABLE OF CONTENTS

Pen Pals	4
TRI-REZ-ED	6
Dry Well	8
Micro-Time	9
More PIO	10
Yap	12
Minutes	14
Calendar	15
October Meeting	BC

OFFICIAL SLCC BBS

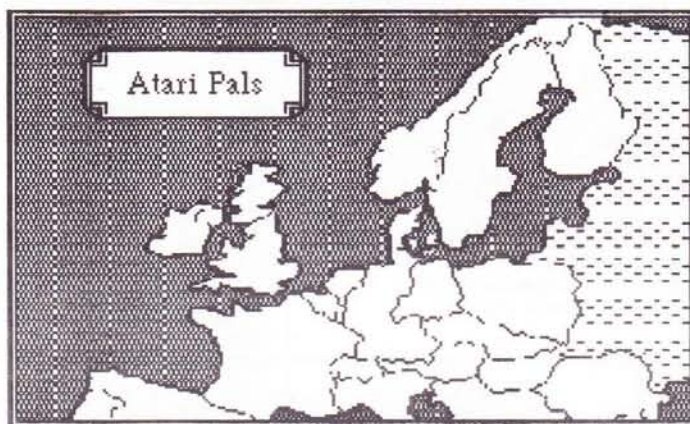
8/16 KEY SYSTEM 415-352-5528

16 BIT STU'S PLACE 415-782-4402

ADVERTISING RATES:

FULL PAGE FOR 3 ISSUES \$100
FULL PAGE \$50. QUARTER PAGE \$18
HALF PAGE \$30. BUSINESS CARD \$5

Par Avion



Scotland
The Netherlands
United Kingdom
France



Article by Jennie Klierer

Recently, I sent a letter to "Page Six" magazine and solicited for Atari pen pals in Europe. "Page Six" is a English Atari User Magazine that the SLCC subscribes to in the newsletter exchange. I received nine enthusiastic responses. All these names I am about to list want to hear from you Californians! I will print the shorter letters in their entirety and give all the important details on the longer letters, such as: type of Atari, double or single sided disk drives, ...etc.

James Stevens
42 Mosley Street
Barrow-in-Furness
Cumbria, LA14 2AZ
London,

(Just tells that he upgraded from an 8 bit to an ST and that he is interested in any public domain swapping you want to do. He is a new ST owner.)

Dave
9 Whitestone House
Clarkwell Estate
Oldham
Lancashire
England
OL1-2EA

"...over here in England we don't get a lot of PD software...I am interested in any new AMERICAN software ... We don't always get all the titles sold in America. I think it's mainly due to the fact that most English users use their computers for games. I mainly use my ST for sampling music, CAD, desktop publishing and application software. I would also like to know if you can load Mac transferred software into the ST without the Magic Sac."

520 ST mono and color, 2 double-sided drives.

Charles George Rowe
58 Trowbridge Road
Harold Hill, Romford
Essex, RM3 8YW
England

(130 SE with 2 1050 disk drives, 520STM 1 MEG, twin Cumana disk drives, Philips 8833 Colour Monitor, MP165 Printer and a WS 2000 modem.)

Main interest is in graphics, but has 300 D/S disks with games, utilities and adventures. He hopes to hear if any members have found uses for Stero-tek 3D glasses.

Paul Draper
19, Plassey Square
Penarth
S Glam
CF6 1HD
Great Britain

Owned an ST for about 10 weeks now. Before the ST he owned a Sinclair Spectrum. His main interest is Adventures: he is playing the Pawn, Leather Goddesses and the Lurking Horror right now. "I've got a couple of disks of Public Domain software from my local computer shop but I find it hard to come by in this part of the country."

(no information on type of ST or drives)

Peter Smith
141 Highgate Rd.
Sibley
Loughborough
Leics. LE15 7PW
United Kingdom

This letter starts out kind of funny:

"Dear American(s)

I am interested in swapping public domain software with your club members.

I have over 30 public domain disks mainly in 1 meg format but 99% of these can be put down to 1/2 meg !

If you are interested in establishing a contact, then please send me lists and details. Then I will send my lists by return.

Logging off, P.

Smith

(520 ST mono, double sided drive)

Harle Christian
330 Rte de St Omer
62222 St Martin
France

" I'm very interested with exchanging programs. Send me your list and also the way to do with exchange with you. Please answer! I'll be very proud to correspond with a U.S. friend. Oh...I have a 520 ST single sided . There's a lot of French clubs and PDS too.

Bye, nice to read you,
HC

Gordon Tarling
87 Cowley Mill Road,
Uxbridge, Middx.
UB8 2QD
England

"I am very keen to have a penpal in the USA... I am age 38, married with two children, aged 4 and 5. I work for British Airways as an avionics engineer, engaged on the maintenance of Concorde and Boeing 757 aircraft. I have been an Atari enthusiast for around 5 years, having progressed from one of the original 400's to my present 520ST FM which I have now had for around 4 weeks. ...I also own a 130 XE, 1050 disk drive and 850 interface. My other main hobby apart from computing is building and flying radio controlled model aircraft, mainly electric powered or gliders. I am extremely keen to get a hold of which would enable me to use my ST in the design or building of my model aircraft. I belong to a local Atari user group but regret to say that there does not appear to be a great deal of public domain

software that is freely available at the moment. Anyway if you are able to put me in touch with someone, I can promise a healthy exchange of ideas , plus whatever software is around at the time.

Looking forward to hearing from you soon,
Best wishes,

Gordon Tarling

Michael Black
23 Annan Court
Hallglen
Falkirk
Central Region
Scotland

(He is very interested in communicating with our club and sent lists of his software, but he needs to be advised that only public domain software is ethically correct to trade-especially if he wants programmers to continue to develop software for the ST. He has a 520ST FM)

Public Domain:

Toy Prolog-German
Toxic Formatter

Neochrome Pictures
Rob Hubbard's music demo

The Gelflin
P.O. Box 71
508OAB Hilvarenbeek
The Netherlands

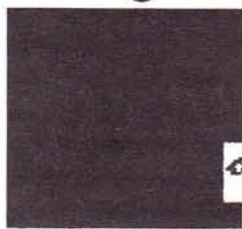
(He also needs to be made aware of Public Domain software trades rather than copyrighted programs. His favorite games are arcade-type. He has an Atari 1040 ST, color.)

So that's the list SLCC members. I hope some of you respond. There seems to be a lot of enthusiasm over there. Maybe you can get an interesting P.D. program to put on our disk of the month. Just contact our software cha^o submit your newest find.

JK

TRI-REZ-ED

A Programmer's Dream Come True

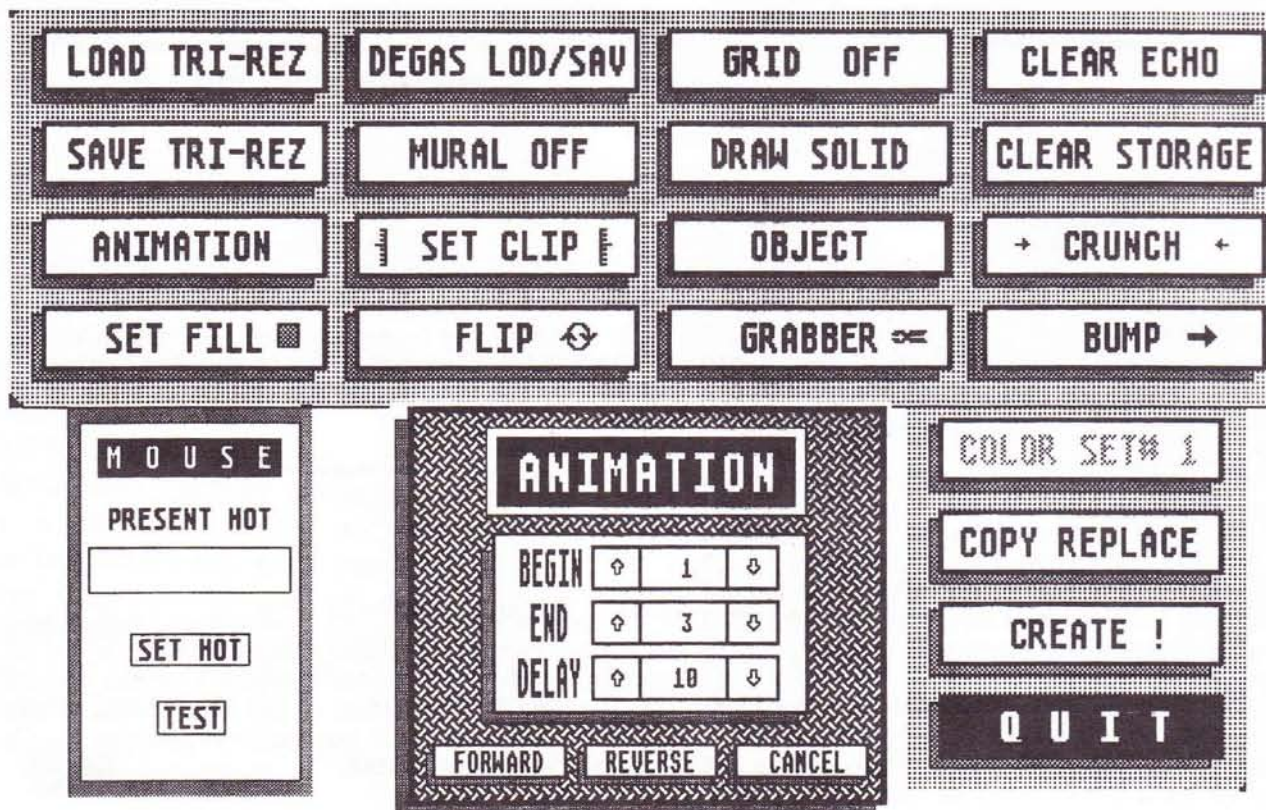


Software description by Stephen Everman

When Paul Pratt and I sat down to write TRI-REZ -ED it was out of desperation. As you may know we write for *ANTIC*, and were tired of creating animated objects on graph paper. So we decided to write *ANTIC* and ourselves a simple type-in object editor. We thought about Atari Basic briefly but, remembering how begrudgingly it did BIT BLOCK TRANSFER (moving one part of the screen to another), we decided on PERSONAL PASCAL. And although OSS's Pascal isn't that fast either, we did manage to use a Pascal version on several programs that will start showing up in *ANTIC* in February. Then this wonderful new language called GFA Basic hit the market. We were in love the minute we opened the manual, and

saw a series of commands, humbly called: GET, PUT, SGET, and SPUT. These commands are in effect, a simple way of doing split-second BIT BLOCK TRANSFER. You can grab a copy of the entire screen by simply saying "SGET SOME_STRING_NAMES" and put it back with "PUT SOME_STRING_NAMES". These were exactly the commands you need for any kind of graphics and we instantly scrapped the Pascal version called 2-REZ, and began the only full-fledged three resolution object, mouse editor, on the market. It's called TRI-REZ-ED. This is the object editor we both always wanted.

It is done with as much care for detail as the finest drawing programs and packed with every feature we ever complained to each other about not having. For example, I have always hated having to change to the background color to remove one or two misplaced pixels, so we built a permanent eraser that is activated by holding down both



CREATEBEGINING
CELL

1

ENDING
CELL

5



ATARI BAS

PASCAL

ASSEMBLY

GFA BAS

C

CANCEL

SET CLIPNUMBER
OF
WORDSNUMBER
OF
LINES

SET CLIP

CANCEL

mouse buttons. Paul on the other hand hated not knowing pixel by pixel where he was on the screen, so two features were added; a ruled edge that follows your mouse around, and the ability to draw spaced, so the background shows through the activated pixels. We wanted to be able to load, and save DEGAS pictures from TRI- REZ, so we added MURAL storage to accomodate that. Although you can use it to make and load clip art, our intention was to be able to see our objects in relation to the world they will be living in. Many programs use this trick, on things like space ship control panels. The entire thing is drawn with a drawing program, then small parts of it are animated to give the affect of a lively control panel. TRI- REZ is not only good for this sort of thing, it was designed for it. You simply clip pieces of the DEGAS picture for editing in TRI- REZ. Then animate it to see how it looks, and drop the code TRI- REZ creates into your program (TRI- REZ would create, and finally decided on the simplest way possible).

This of course was the most difficult, and time consuming for us. What we did was have TRI- REZ automatically turn your objects and mouse pointers into code that runs, as is, in the language of your choice. Assembly, Pascal, C, Atari Basic GFA BASIC, it doesn't matter. You

choose the language and TRI- REZ creates the code, and data. You simply merge the TRI- REZ code into your program. This decision had two results. One it allows someone who knows nothing about animation to do it, and two it doubled the size of the program. TRI- REZ had to be split onto two disks, a color version, and a mono version. A demo that does everything but, SAVE, and CREATE code, can be found on your own BBS, STU's place (415) 782- 4402, under the name "LO_3RZDM.ARC". Feel free to get yourself a copy, and pass it around. It's a nice long file for up loading somewhere, to get a lot of down load credit also. For a full featured working copy written in assembly and GFA Basic contact:

Bay-Cities Software
P.O. Box 404
Union City, CA 94586
\$54.95

TRI
REZ
ED

Editor's note: Come to the ST Sig Meeting, November 9 th, for a demo of this program.

Dry Well

by D.B.

Reprinted from Sept./Oct. issue of SBACE GAZETTE

He was an eight bit hacker
And he knew it all by heart,
He never met a program
That he couldn't take apart.

They could lock it, they could hide it,
It mattered not a whit;
It might take a little effort
But he destroyed it bit by bit.

Oh, he never had a lesson,
So who's to say he was to blame,
Yet his knowledge was ferocious
And his attitude the same.

We could write our code in Basic
In source code or in C...
He just chuckled while he cracked it
And he cracked them one, two, three.

But it seems he has a problem
And his hobby's off the track,
For he stole so many programs
That there's no more code to crack.

Don't you think it's kind of funny
Though he found the mother lode,
He expended all that effort
Yet he never wrote the code?

Not one program did he publish
Though he knew it every bit;
Wanted just to keep on hacking
So we all could benefit.

He hated 'freeware' with a passion
And his manner would get gruff
When he saw they wrote a program
And didn't try to hide the stuff.

Well, I don't know just how you see it
But here's the way it seems to me.
I'm sure all you programmers
Who've labored hard, agree.

That guy was really selfish
As he robbed our daily bread
I wonder if he's sorry that
His golden goose is dead!

Make the News

HEADLINES

THE PUBLICATION OF DEDICATED EASY-DRAW USERS • VOLUME 1 • ISSUE 1



Pictured here is a sample of what the new Easy-Draw Supercharger can do! The photograph was scanned at 1500 DPI, loaded into Easy-Draw and printed at 300 DPI on the HP Series II laser printer.

**New
Supercharger
Adds PIZZAZZ
to all Your
Pages!**

The answer to your Desktop Publishing needs is here: the Easy-Draw Supercharger! The Supercharger lets you load scanned images PLUS all or part of your favorite bit-mapped picture too. Instantly, you'll have access to hundreds of images that may be used for news-letters, flyers, ads and more!

With the Supercharger, you won't be limited to screen resolution images. Using resolution independent image files, the Supercharger allows you to preview scanned images on color or monochrome screens and then print out at a much higher resolution.

Continued on page 4

with Easy-Draw!

Create professional-looking newsletters, flyers, ads, brochures, company reports, forms, technical illustrations, and more with Easy-Draw® by Migraph!

Easy-Draw is fast, powerful, and fun to use. Design a page in any format using Easy-Draw's object-oriented text and graphics features. Extensive editing tools make it easy to achieve the results you want. Add bit-mapped and scanned images to your page with the new Easy-Draw Supercharger™.

With Easy-Draw and its companion products you can put together a page layout or design system that meets your needs! Now only \$99.95.

Additional Easy-Draw Companion Products:

Supercharger: Add bit-mapped and scanned images to your Easy-Draw page \$49.95

Font Pack #1—Contains 2 fonts: Rocky and HiTech (9 pin only) \$39.95

Personal Draw Art—Has over 150 predrawn images incl. borders, vehicles, symbols \$29.95

Technical Draw Art—Symbol libraries for piping, electrical, floor plan design, etc. \$29.95

24-Pin Driver—For use with NEC P, Star NB and Epson LQ printers, incl. Swiss font \$19.95

HP Laserjet Plus Driver: 150 & 300 DPI drivers Plus the Swiss fonts. Works with Series II ... \$39.95



Easy-Draw is a registered trademark of Migraph, Inc. Supercharger and Migraph are trademarks of Migraph, Inc.

Migraph Inc.
720 S. 333rd St., (201)
Federal Way, WA 98003
For more info or to order call:
1 800 223-3729
206-838-4677

What Time Is It ?

A review by Jim Moran

Like most user's of the Atari ST computers I have not made much use of the clock or date feature that is built into the ST. While it is a nice feature the time and date must be set each time the computer is powered up. During a normal session I will probably power up half a dozen times and that makes for a lot of clock settings.

Those days are now behind me, thanks to a small clock card from Micro-Time Electronics the ST knows the time and date and will set itself each time I power up. More importantly all my disk saves will have proper time and date stamps on them.

The Micro-Time Electronics clock card is a small card that plugs in under the ST Keyboard. Two small ni-cad batteries keep the card powered when the ST is shut down. This clock card comes complete with all needed parts and enough P/D software to give you almost any clock display you could wish for.

Installation of this card is simplicity itself. After discussion with Dan Freeman the president of Micro-Time Electronics I decided to make the installation myself to see if it was as simple as he stated, it was. After about ten minutes the clock card was installed and the ST was busy telling time.

A word of warning, this card fits very close and if you have modified your ST you could run into some difficulties. The card was installed in the club's 520 ST which has been upgraded to one meg and while there was adequate space there was none to spare.

After letting the batteries charge properly, an automatic feature, the clock has performed very well. The disk of P/D software that comes with the clock has all kinds of clock and calendar programs and I have used most of them over the last month or two. All of these programs seem to work as advertised. Personal taste would decide which of the clocks to use. As of now I use the modified Control. ACC and the Calendar. ACC which seems to be the best for my use.

The only problem that has shown up since the Micro-Time Electronics clock card was installed about two months is minor but annoying. It seems that some software interferes with the proper

timekeeping of the card. I have tried to isolate the program or programs causing problems but up till now haven't had any luck. Obviously any program that interferes with the Control. Acc would be suspect.

Overall the clock card works great and is well worth its \$49.95 retail price tag. so if you can't afford or don't want to buy the new Mega with its built in clock this clock card is a good alternative. For further information call Micro-Time Electronics at 1-800-223-3978.

END

Micro-TIME
ELECTRONICS

520 ST 1 MEG
Upgrade \$104.95 *
Drive upgrade \$134.95 *
Single Sided to Double Sided

* Plus \$5 Each for shipping

ST Repair Prices

520 ST Repair \$64.95 *
1040 ST Repair \$79.95 *
Single Sided Drive Repair \$64.95 *
Double Sided Drive Repair \$89.95 *
Color Monitor Repair \$124.95 **
Monochrome Monitor Repair \$97.50 **

* Plus \$5 Each for shipping

** Plus \$10 Each for shipping

Micro-Time ST Internal Clock Card
Comes complete with a full disk of the
latest Public Domain Software Plus
Clock Utilities!

\$49.95

Free 2nd Day Air
Shipping!

NEW! from Micro-Time Electronics

Solid Oak Disk Safe

- * Holds 120 - 3 1/2" disks
- * Carrying handle
- * Divided in 8 removable sections
- * Safety clasp for security

\$39.95

Free ground Shipping!

New Toll Free Order Line 1-800-223-3978



MICRO-TIME ELECTRONICS



837 NE 6th Grants Pass, OR 97526 (503) 476-9509

More 1200XL and Parallel I/O stuff

There are two errors in the October 1200XL PIO article. Two of the connection points are wrong, pin 31 and pin 40. I have reprinted the entire list with the changes in bold print for your convenience. I did wire my 1200XL using this list and test it with a 256K MIO from ICD. In order to connect the free end of the 50 conductor cable to the MIO, I used a crimp-on connector identical to the one used on the MIO cable. Remember to keep the length down - mine extends from the 1200XL about 6 inches. I routed the added flat cable thru the joint in the case on the right side of the computer and plugged it into the MIO, which sits out of the way of the other cables and cartridge. By the way, the FCC would NOT approve this modification... use a monitor.

The correct pin connections:

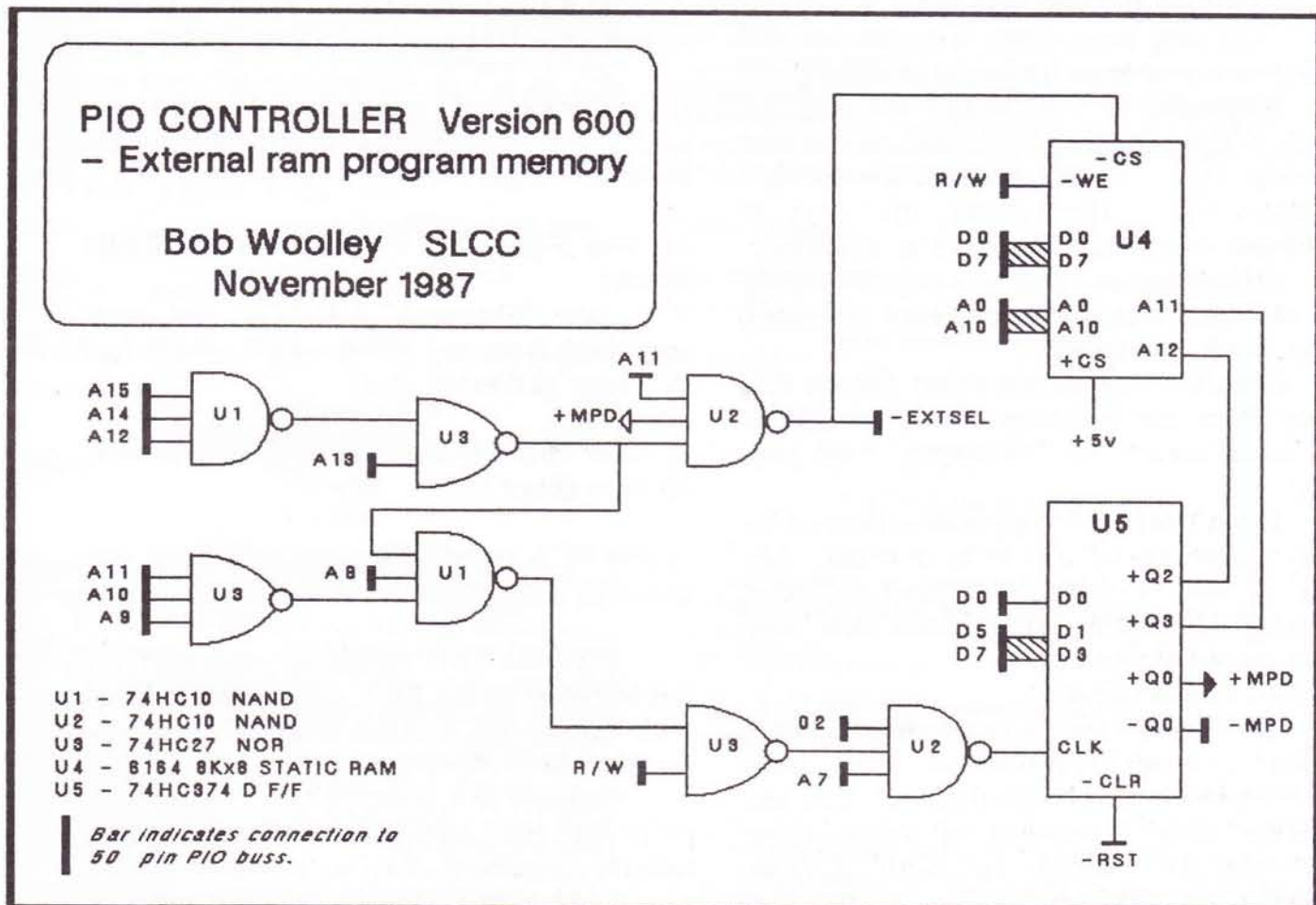
CONN	BOARD	CONN	BOARD	CONN	BOARD	CONN	BOARD
49	n/c	50	gnd	23	pin 31 U21	24	pin 30 U21
47	n/c	48	n/c	21	pin 33 U21	22	pin 32 U21
45	gnd	46	pin 5 U11	19	gnd	20	pin 25 U21
43	pin 14 U14	44	pin 6 U25	17	pin 23 U21	18	pin 24 U21
41	pin 8 U25	42	gnd	15	pin 20 U21	16	pin 22 U21
39	n/c	40	pin 11 U14	13	pin 18 U21	14	pin 19 U21
37	n/c	38	pin 16 U14	11	pin 16 U21	12	pin 17 U21
35	pin 4 U21	36	pin 2 U21	9	pin 15 U21	10	gnd
33	n/c	34	pin 40 U21	7	pin 13 U21	8	pin 14 U21
31	pin 39 U21	32	gnd	5	pin 11 U21	6	pin 12 U21
29	gnd	30	gnd	3	pin 9 U21	4	pin 10 U21
27	pin 27 U21	28	pin 26 U21	1	gnd	2	pin 2 of HC08
25	pin 29 U21	26	pin 28 U21				

Now that you finally got your 1200XL set up to run PIO hardware, what are you going to plug into it? One great choice is an MIO from ICD. It will provide an RS-232 interface, a printer interface, a hard disk interface, and up to 1 meg of ramdisk. If you want to plug and run, this is the way to go! Of course, if you were the plug and run type, you wouldn't have gone to all the trouble to adapt your 1200XL - you would have bought an 800XL. The final sentence in last month's article told you to get a Supra MicroPort kit - did you? I have seen them around for less than \$20, which is a pretty good deal. Solder in .025 square pins instead of the 50 pin PC board connector supplied in the kit and you can use the same plug as the MIO board. This makes a nice setup, since the Supra has it's own power supply and a nice board already made for you. Now you are ready for this month's project.

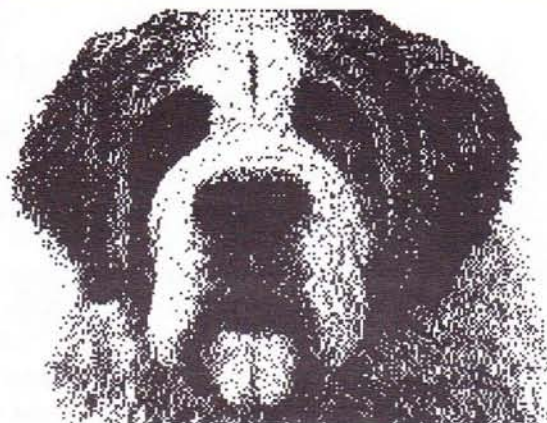
The main problem with the MIO, particularly on a 1200XL, is that it is not programmable. I did a PIO controller in the July and August Journal that you could program any way you pleased. It worked just fine with ramdisk and coldstart functions, but it did have a few flaws. First, it only had 2K of program space. This may seem like a lot, but it fills up fast. Second, the program memory was actually part of the ram inside the computer, so other software could overlay the code and crash the system. Also, you lose the code every time you power off the 1200XL (like to plug in a cartridge). Therefore, this month's project is a PIO controller that has 8K of memory (16K, if you like, ask me) that is external to the system and is powered from the controller power supply.

Something to plug into the PIO on your 1200XL or 800XL

One really nice feature of the 1200XL is the row of function keys along the top of the keyboard. These four keys can combine with the SHIFT and CONTROL keys to decode 16 different keypresses. Instead of trying to use a standard key to perform some system function (like SHIFT-CONTROL A), the new function keys are available to you. Using a standard key almost always conflicts with some program or other that is trying to use the same combination. For example, you want to add a function to the operating system that will set the screen color to black any time you please. This would allow you to change screen colors on a program that does not allow color changes from within the program (like AtariWriter). To cause this action, you need to tell your little routine to do it's thing. Using a combination of keys is the normal method, but whichever mixture you choose will not be available as an input to AtariWriter. When you want to enter CONTROL C to AtariWriter, you just change the screen colors... not what you wanted. Now, the four function keys are not assigned as inputs to the OS. No program would accept or expect an entry from the function keys, so they make good system interrupt keys. All you need is the code to interpret them and someplace to put that code. This month's PIO controller will provide both. The PIO is polled before the keyboard interrupt is executed, so you can 'steal' any function key entry from the keyboard. There is 8K of space for your routines and the code is not lost when you power off your computer. Build the circuit below on a Supra MicroPort kit and check back next month for the conclusion of this project.



The Saga of Yap...



Article by Dave Small
reprinted from Current Notes

I want to make it clear at the very beginning of this article that I'm a dog lover. Grew up with three German Shepards. I get along with dogs just fine.

Except for the one next door.

The dog next door, Yap (as we call him), has a problem: he barks constantly.

Beginning at 5:30 in the morning, he barks at the paperboy. At 6:30, at the cars driving by. At 8, at the schoolkids walking by. Throughout the day, at airplanes overhead. He barks at anything. By mid-afternoon, he's hoarse, but ready for the kids coming home, cars returning from work, and so on.

Generally, he stands about fifteen feet away from my bedroom window, right at the fence corner, and opens up. Yap, yap, yap.

I can't tell you how many times I've been woken up by this little charmer. My kids (3 and 4 years old) used to come running downstairs to announce that they were scared of the dog.

So I began to plan.

Evil plots filtered through my mind, which I won't mention to keep from further tarnishing my good name. You can imagine what I thought of doing, those mornings I'd stayed up until 2 a.m. working on the Magic Sac, when Yap would start in at 5:30.

One day, as I stood in the shower

listening to Yap (it's a particularly penetrating bark that can be heard while one is in the shower), I had this idea on how to stop him from barking. I did it, it worked, and I thought I'd tell you about it.

I can't be the only person with a barking dog problem.

Fittingly, I cured Yap with an ATARI computer. Here were my components:

- 1) one Atari 800 computer which had (in truth) mostly been gathering dust, with Basic cartridge. No disk even needed.
- 2) one 5-pin DIN connector, from Radio Shack.
- 3) one Kenwood KR-4070 40 watt amplifier, from my college days, which had also been gathering dust.
- 4) one Radio Shack piezoelectric tweeter, 40 watt about \$15.
- 5) one RCA phono plug and cable (cut one end off), from Radio Shack. \$2.

Wire the DIN connector with pin 2 (the big one) to the RCA cable's ground and with pin 3, the AUDIO OUTPUT, to the cable's center (*hot*).

Connect the Atari to the PHONO IN plug on the amplifier, and the piezo tweeter as near to Yap as possible, in this case, hidden by a bush outside the fence. Run a long speaker wire as necessary.

Next time Yap begins to bark, enter

the SOUND commands using the ATARI: SOUND 0,1,10,15. This sets the channel 0 (the "0") to a very high frequency (the "1")- so high people can't hear it at maximum volume (the "15"), with the distortion (the "10") (which is necessary if you're not going to blow the tweeter, you don't want square waves or the like).

Turn the amplifier to about "8", or until clipping occurs. (Clipping is where you're pushing your amplifier too hard, and it starts putting out DC. DC fries speakers. If you don't have an oscilloscope to detect it, the only way to prevent clipping is not to turn up your amp too loudly).

You won't be able to hear the sound being made, because it's too high a frequency; it does make your teeth itch, however. (If you'd like to hear what the dog hears, drop the frequency a bit, something like SOUND 0,10,10,15. Piercing, isn't it?)

The dog on the other hand, has no problem hearing this frequency (which is how dog whistles work), and at this point, ceases barking, wonders what on earth is going on, and beats a retreat back inside his house.

At this point, shut off the amp. after three weeks or so, we had Yap well trained. Not a peep out of him, because every time he barked, he'd get 40 watts of high frequency in the ear. I used to get up at 5 A.M., drink coffee, and await the paperboy, my finger on the volume control. I must confess to evilly grinning too, all those mornings he woke me up. These days, he doesn't require much training. Perhaps once a week we have to remind him not to bark. He's a quiet

dog now.

Best of all, our neighbors never heard a thing. All of this happened at a frequency far to high for them to hear. That's the beauty to this solution.

Well, that's the story of how I cured Yap, using an ATARI computer as a frequency generator. If you have a similar problem, you probably have most of the components on-hand to solve it; twenty bucks worth of electrical parts is well worth a little piece and quiet. Remember, if you do this, the object isn't to hurt the dog, it's to make him a bit uncomfortable while he's doing what you want to train him out of. You have to remember to turn the sound off when he stops barking.

When I bought the ATARI 800, back in 1981, I was told it was a "home computer." Since that time, there's been a lot of debate as to whether or not a "home computer" is actually useful. I don't debate the point anymore, mine is worth it's weight in gold.

I get to sleep in these days.

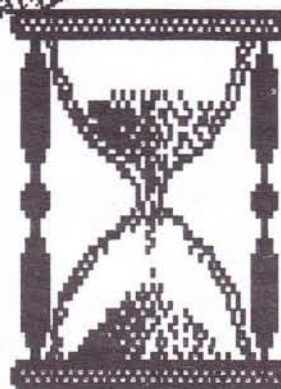


CUSTOMIZE YOUR ATARI ST COMPUTER

EZRAM	Z-PORT	Z-TIME
Solderless 1/2 meg up-grade for your 520st. Installs in less than 15 minutes using a plug-in method. - Illustrated instructions - Increases RAM disk size - Blitter compatible - 1 yr. warranty - Includes free software Back to school sale 15% off. Retail \$149.95 To order: Contact your local dealer or direct from Terrific Corp. 17 St. Mary's Ct. Brookline, MA 02146 (617) 232-2317	Control the outside world with Z-port. A 23 channel digital I/O device. Z-PORT accesses the computing power of the ST directly, allowing computer management of lab equipment, high speed relays and almost any adaptable electronic device. Includes battery backed up clock. Retail \$149.95 Order by Visa/MC/COD/Prepay EZRAM, Z-TIME, Z-PORT are trademarks of Terrific Corp. ATARI, 520, 520stfm, 1040 are trademarks of Atari Corp.	Battery backed up clock/calendar on a chip. Installs in minutes to give you 10 or more years of accurate time keeping. - Chip sized - Illustrated Instructions - 3 yr warranty - includes software 520 st \$49.95 520stfm, 1040 \$59.95 Apple and IBM versions available. terrific PERIPHERALS

Minutes

from the October meeting



General Meeting Minutes October 6, 1987

Meeting called to order at 8:00 PM by President Barton. Roll Call of Officers: Present; Barton, Sawley & Moran. Excused; Hansen (attending school).

The President discussed the Tanforan show that the club attended for three days starting September 25th. This show was put on by Home Computing Centers and had three User groups and about twenty vendors in attendance. The MEGA ST's and the new 1200 baud modems by Atari finally made their appearance. The modems were being sold for \$99 and the four meg. Megas for \$2200 without a monitor. While the show seemed to be a success for Home Computing it was not much for the club, while P/D disk sales offset expenses they did not generate much profit for the club.

The club will participate in the Oakland show to be held at the Oakland Coliseum on October 17 & 18. Members wishing to work the show should contact President Barton at 352- 8118.

Beginner SIG leader Richard Stiehl advised the club of his new phone number. 865-6859.

President Barton stated he had not heard back from Atari on the \$1000 they owe us.

Program Chairman Dick Scott introduced tonight's speaker, Jack Powell, from the product development team at ANTIC magazine. Jack was here to show off Antic's CYBER STUDIO program and its companion programs CYBER CONTROL, CYBER PAINT and CYBERMATE. Also SPECTRUM 512 the new color paint program that allows the ST to show 512 colors at one time.

Jack explained that all these programs started with CAD 3D and Cyber Studio includes CAD 3D version 2 plus. Much of the ability demonstrated by these programs comes from CYBERMATE a programming language developed specially for animation. Jack demonstrated the power of these programs by programming an animation sequence

as part of his talk.

After a short break the meeting resumed with a raffle and a short question and answer session.

Being no further business the meeting was adjourned at 10:25 PM.

Respectfully Submitted Jim Moran - Secretary

CHD

Tired of Paying High Online Charges and Sign-Up Fees?

COMPUTALK TCS™

The BBS for your Atari™

- Network of 6 Atari computers linked together.
- Compu-Gab, CB Simulation with both Public and Private areas.
- Compu-Trek, one of 5 Multi-User Online Adventures.
- Over 2,000 downloads for both the 8-bit and ST Computers.
- Accessible through PC Pursuit.
- Online Conferences, Message Bases, E-Mail, Atari News, and more!!

★ ONLY \$25.00 for 6 Months ★
No Sign-Up Fees / No Online Charges

Call today and sign-up online for a trial account.
(817) 589-2588 (Direct Access)
(214) 589-2588 (using PC Pursuit)

MasterCard

COMPUTALK TCS

P.O. BOX 18346 / Fort Worth, Texas 76118

VISA

November 1987

SLCC Calendar of Events

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
1	2	3 MAIN MEETING 8PM San Leandro Public Library	4	5	6	7
8	9 ST SIG 8PM San Leandro Public Library	10	11 EXECUTIVE BOARD MEETING	12	13	14
15	16	17 BEGINNER'S SIG 7:30PM TELECOMMUNI- CATION SIG 8 PM	18 EDUCATION SIG 7 PM ST SOFTWARE SIG 8 PM	19 BASIC SIG 8PM	20	21
22	23	24 PASCAL SIG 7 PM BUSINESS SIG 8 PM	25	26	27 JOURNAL DEADLINE	28
29	30	31				

Now That It's Plugged In....

The SLCC Beginners SIG is for those who own Atari 8-bit computers and consider themselves a novice or beginner. We discuss Basic, DOS, operations, system set-up, keyboard functions, and other introductory material. SIG meetings are held on the third Tuesday of each month at 7:30 PM. Call Richard Stiehl at 352-3444 or 562-7485 for information and directions.

See you there..... RS

SIG (special interest group) leaders and their phone numbers are located on the Table of contents page at the front of the Journal. Please call them for more details or directions.

November Meeting

By Dick Scott

For our next meeting, our guest speaker will be Alex Leavens, of ACTIVISION. This is one meeting that you will want to attend and while you are there, pick up 'disk of the month' for your 8 or 16 bit Atari.

I certainly appreciate Mr. Jack Powell, of Product Development at ANTIC MAGAZINE for speaking at our October meeting. It was a very good presentation of new graphics programs that will interface with each other to produce fantastic 3-D animated sequences.

If any of our members know of a company or individual that may be interested in demonstrating their products, please let me know at the meeting or call me at home. At the present time, the meetings are booked thru December (Broderbund Software).

SEE YOU AT THE MEETING!

SLCC
JOURNAL



P.O. BOX 1506, SAN LEANDRO, CA 94577-0374

Next Meeting:

November 3, 1987 • 8 pm
San Leandro Community Library
300 Estudillo Ave

TO

FIRST CLASS MAIL
